

of the Mornington Teninsula





COMMITTED TO A

SUSTAINABLE PENINSULA

WHY CONTROL WEEDS?

Weeds are a major threat to remnant vegetation and the fauna that rely on locally native plants for survival. Weed invasion is responsible for the loss of many species of plants and animals from areas across Australia, including the Mornington Peninsula. Weeds also impact on waterways, stock, pets, crops, tourism, health (e.g. allergies) and safety (e.g. road visibility), gardens and the landscape of an area.

Note: Removal of weeds that are 'trees' or 'shrubs', within the Shire, may require a Planning Permit. If you intend to remove weedy trees or shrubs, ensure that you discuss it with the Shire before removal by calling 1300 850 600. A permit is not required to remove 'noxious' weeds.

WANT MORE INFORMATION?

Mornington Peninsula Shire - www.mornpen.vic.gov.au Ph: 1300 850 600 or +61 3 5950 1000 Department of Primary Industries (DPI)

Ph: 136 186 - www.dpi.vic.gov.au/weeds Department of Sustainability and Environment (DSE) Ph: 136 186 - http://www.dse.vic.gov.au/

Weed and Pathogen Publications

Armillaria Root Rot Fact Sheet. Department of Sustainability and

Bush invaders of south-east Australia. Muyt, A. (2001). Environmental weeds. Blood, K. (2003).

Management of Phytophthora cinnamomi for Biodiversity Conservation in Australia. Department of the Environment and Heritage (2006). Myrtle Rust Fact Sheet. Department of Primary Industries (2012). Weeds of the South-East: an identification guide for Australia. Second

Ed. Richardson R.G., Richardson F.J. and Shepherd R.C.H. (2011). Brochure credits

Photography: Linda Bester (LB), Matthew Dell (MD), Rosamond C. H. Shepherd (RS), Kate Blood (KB), Friends of Sherbrooke Forest (FS), Helen Moss (HM), Daniel Joubert (DJ), Forest & Kim Starr (FKS) Garrique Pergl - Mornington Peninsula Shire (GP), Department of Primary Industries (DPI) and Ian Smith - Bushbury Forest Pathology Service (IS). Technical advice: Dr Robert Holmes (DPI) and Andrew Henderson

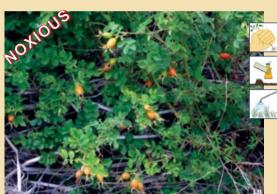
Production: Linda Bester & Matthew Dell (Universal Ecology Services) and Mornington Peninsula Shire.



Berry-flower Heath *Erica baccans* Flowering time: Spring. Reproduction: Seeds; Spring – Summer. Control time: All year.



English Broom Cytisus scoparius Flowering time: Spring. Reproduction: Seeds; Summer. Control time: All year.



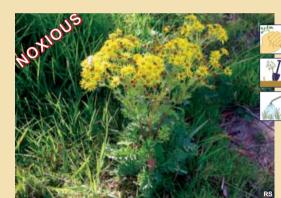
Briar Rose Rosa rubiginosa Flowering time: Mostly Spring – Summer. Reproduction: Seeds; Summer – Autumn. Control time: Summer – Autumn, before fruits mature.



Blackberry Rubus fruticosus spp. agg. Flowering time: Early Summer. **Reproduction:** Berries ripen late Summer – early Autumn. Control time: October – April.



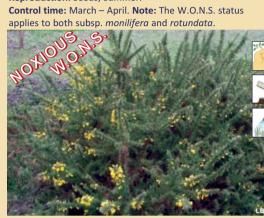
Flax-leaf Broom Genista linifolia Flowering time: Winter – Spring. Reproduction: Seeds; Summer. Control time: October – December.



Ragwort Senecio jacobaea Flowering time: October – March, but damaged plants may flower any time. Reproduction: All year. Control time: All year.



Boneseed Chrysanthemoides monilifera Flowering time: Winter – Spring. Reproduction: Seeds; Summer.



Gorse Ulex europaeus Flowering time: Sporadic all year; predominantly Spring. Reproduction: Seeds; Predominantly Summer. Control time: All year.

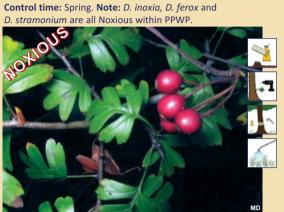


Sallow Wattle Acacia longifolia Flowering time: Spring. Reproduction: Seeds; Summer. Control time: All year.



SHRUBS

Thorn Apple species Datura spp. Flowering time: Mostly Summer. Reproduction: Seed.



Hawthorn Crataegus monogyna Flowering time: Spring – Summer. Reproduction: Seeds; Autumn – Winter. Control time: September – April.



Spanish Heath Erica lusitanica Flowering time: Winter. **Reproduction:** Seeds; Winter – Spring. Control time: All year.



Bracelet Honey-myrtle Melaleuca armillaris Flowering time: Spring. Reproduction: Seeds; Summer.



Ink Weed Phytolacca octandra Flowering time: All year. Reproduction: Seeds; All year. Control time: All year.



Sweet Hakea Hakea drupacea Flowering time: Winter. Reproduction: Seeds; All year. Control time: All year.



Cape Broom Genista monspessulana Flowering time: Spring. Reproduction: Seeds; Summer. Control time: June – November.



Italian Buckthorn Rhamnus alaternus Flowering time: Summer – Autumn. Reproduction: Seeds; Autumn – Winter. Control time: All year.



Tree Lucerne Chamaecytisus palmensis Flowering time: Winter – Spring. Reproduction: Seeds; Summer. Control time: All year.



Cotoneaster species Cotoneaster spp. Flowering time: Spring. Reproduction: Seeds; Late Summer – Autumn. Control time: All year.



Mirror Bush Coprosma repens Flowering time: Late Spring – early Summer. **Reproduction:** Seeds; Late Summer – early Autumn. Control time: All year.



Willow Hakea Hakea salicifolia Flowering time: Late Spring. **Reproduction:** Seeds; All year with suitable conditions. Control time: All year.



DEFINITIONS Environmental weeds

are plants that invade disturbed areas and areas of native vegetation. The CALP Act does not control environmental weeds. Noxious weeds

are plants that are described in Victoria's Catchment and Land Protection Act (1994). This Act defines who should control noxious weeds. Weeds Of National Significance (W.O.N.S.)

Weeds can be pulled out by hand if it is easy to do so and if material will not be left behind e.g bulbs and rhizomes. All fertile material must be bagged.

Digging may be necessary to remove material such as bulbs. It's often not a good option for large infestations or f amongst areas of native vegetation.

This involves cutting a stem as low as possible to its base, and painting the fresh cut immediately with neat

herbicide. Ideal for woody weeds.

Drill and fill refers to drilling a number of holes around the stem, into the sapwood of a woody weed, and filling i mmediately with neat herbicide.

Refers to the use of a sharp blade to cut away the outer bark and sapwood. Only suitable for woody weeds that do not reshoot or sucker when cut.

Involves wiping neat herbicide directly onto the plant's leaves. Useful method for plants which have storage organs

that are not easily dug up e.g. bulbs.

Herbicide spraying should be avoided

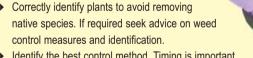
within or near waterways and native regetation, unless you are trained to

apply it. Always read the label.

Involves slashing weeds to either stop them from setting seed, or to reduce their mass, often before applying herbicide. Avoid seed laden weeds.

The Commonwealth Government has declared twenty weeds as being nationally significant based on criteria including environmental impact, potential for spread and economic cost.

SOME TIPS ON REDUCING **WEEDS IN YOUR AREA**



▶ Identify the best control method. Timing is important.

▶ Minimise disturbance to the soil profile to avoid potential weed spread/erosion.

Use weed control to help reduce wildfire fuel loads.

 Avoid spreading weed seeds via clothing, equipment and vehicles accessing the site.

▶ Remove weeds in stages to help minimise any negative impacts

on native animals that are using them as refuge. ▶ Identify which weeds are being utilised by native fauna and

provide alternative habitat. ▶ Revisit control sites before targeting new areas.

▶ Encourage native plant regeneration when weeding. ► Consider enhancing the attractiveness of your garden to native

fauna by selecting suitable local native plants. ▶ Avoid bringing soil into your property from elsewhere, as it is likely to contain weed seed.

 Avoid purchasing and using soil, mulch and other plant material (e.g. Pea Straw) that may contain weed seed.

Avoid disposing of aquarium plants and animals on your land or

into waterways. ▶ Consider health and safety precautions when controlling weeds,

and always read herbicide labels before use.

VINES AND SCRAMBLERS



Asparagus Fern Asparagus scandens Flowering time: Spring. **Reproduction:** Seed within orange berries; Summer.



Climbing Groundsel Senecio angulatus Flowering time: Winter. Reproduction: Seeds; Spring.

Control time: All year.



Flowering time: Autumn **Reproduction:** Seeds; Winter – Summer Control time: All year



Dolichos Dipogon lignosus Flowering time: Spring – Summer. Reproduction: Seeds; Summer. Control time: All year. Note: Flowers may also be white.



Flowering time: Spring – Summer. Reproduction: Seeds; Autumn – Winter. Control time: August – February.



English Ivy Hedera helix Flowering time: Late Autumn – Winter. Reproduction: Seeds; Winter – Spring. Control time: All year.



Flowering time: Spring. **Reproduction:** Mostly vegetatively; rarely seeds. Control time: All year.



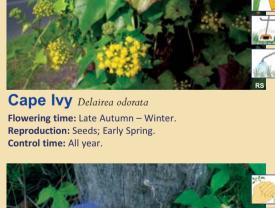
Japanese Honeysuckle Lonicera japonica Flowering time: Spring – Summer. **Reproduction:** Seeds; Summer – Autumn. Control time: All year.



Flowering time: Spring. Reproduction: Seeds; Summer. Control time: June – October.



Madeira Vine Anredera cordifolia Flowering time: Autumn – Winter. Reproduction: Seeds; Spring. Control time: All year.



Morning Glory Ipomoea indica Flowering time: Spring – Summer. **Reproduction:** Vegetative only. Control time: All year.



Climbing Dock Acetosa sagittata

Flowering time: Autumn – Winter.

Tradescantia fluminensis Flowering time: Summer. Reproduction: Vegetative only. Control time: All year.





PLANT PATHOGENS & THEIR IMPACTS on the Mornington Peninsula

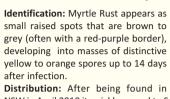
What is a plant pathogen?

A plant pathogen is an agent that can cause disease and death to occur in living plants. They are capable of causing extensive damage to public and pri vate property (including both natural and planted vegetation), and can have significant impacts on industries that rely heavily on good plant health.

Which pathogens occur on the Peninsula?

There are three main pathogens that are of concern here. As each is a fungus they produce spores which spread quickly via air, wind, water, soil, clothing, vehicles and equipment.

MYRTLE RUST Uredo rangelii **Identification:** Myrtle Rust appears as



developing into masses of distinctive yellow to orange spores up to 14 days after infection. Distribution: After being found i NSW in April 2010 it quickly spread to South-east Queensland followed by Victoria in late 2011. It is now known at numerous sites in Melbourne and country Victoria, including production and wholesale nurseries.

Affected species: It is only known to affect plants in the Myrtaceae family (including Eucalypts, Melaleucas, Callistemons and Lilly Pillys) hence its name. Origin: Sth America. Spread: As it is a fungus, it produces spores which spread quickly via air, wind, water, soil, clothing, vehicles and equipment.

Control: Eradication is possible on a small scale e.g. home gardens. Large scale eradication is difficult, and consequently the focus is on minimising

the spread and impact of this organism. For more information on contro visit the following website: www.dpi.vic.gov.au/myrtlerust If detected: If found, immediately record what you see (e.g. number of infected plants, species affected and location) and contact the national Exotic Plant Pest Hotline: 1800 084 881. Do not touch, move or collect samples. Alternatively you can email photos of the material to plant.protection@dpi.vic.gov.au together with your contact details.

CINNAMON FUNGUS Phytophthora cinnamomi

Identification: Verifying its presence is difficult without microscopic analysis, however there are some common signs. If certain plant specie are found to be dead or dying (but not all individuals) in an area of largely healthy vegetation then thi fungus may be a suspect.

Distribution: It has been detected on the Peninsula in eucalypt forests and other vegetation, however no locally with regards to distribution.

formal survey has been conducted Affected species: It affects species across many plant families including the Epacridaceae (heaths) Myrtaceae (e.g. eucalypts), Proteaceae (e.g. Banksias and Hakeas),

Xanthoreaceae (grass trees) and Fabaceae (peas), removing their ability to take up water. Origin: It is believed to be native to South East Asia.

Control: Eradication is very difficult, so as with other fungal pathogens containment is the key. If detected: Contact the national Exotic Plant Pest Hotline - 1800 084 881

AUSTRALIAN HONEY FUNGUS Armillaria luteobubalina

Identification: Infected trees develop inverted the wood, making it stringy. The bark dies and discolours up to 3 m above the ground and clusters of fruiting bodies appear at the base in Autumn (see photo). Distribution: Also known as Armillaria Root Rot,

it can be found in a range of vegetation types

or visit the DPI website: www.dpi.vic.gov.au

throughout Australia. No formal survey has been conducted for this fungus locally. Affected species: It can affect all species of fruit trees, most native trees, plantations, ornamentals, and some herbaceous plants, and is a major cause of

eucalypt deaths and forest dieback Origin: As its common name suggests, it is native to Australia. Control: Eradication is very difficult, so as with other fungal pathogens, containment is the key. If detected: Contact the national Exotic Plant Pest Hotline - 1800 084 881

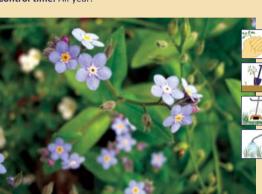
Pathogens - where can I find out more? Contact the Department of Primary Industries (DPI) on 136 186



GRASSES AND OTHER HERBS



African Love-grass Eragrostis curvula Flowering time: All year. Reproduction: Seeds; all year. Control time: All year.



Forget-me not Myosotis sylvatica Flowering time: Spring – Summer. Reproduction: Seeds; late Spring – Summer. Control time: All year.



Paterson's Curse Echium plantagineum Flowering time: Spring – early Summer. Reproduction: Seeds; Summer. **Control time:** September – October.



Agapanthus Agapanthus praecox ssp. orientalis Flowering time: Early Summer. **Reproduction:** Seeds; late Summer – early Autumn. Control time: All year.



Gazania Gazania linearis (left), Gazania rigens Flowering time: Spring – Summer. Reproduction: Vegetatively, and by seed. Control time: All year.



Quaking Grass Briza maxima Flowering time: Winter – Spring. Reproduction: Seeds; Spring – early Summer **Control time:** June – September.



Arum Lily Zantedeshia aethiopica Flowering time: Late Winter – early Spring. Reproduction: Seeds; late Spring. Control time: All year.



Kikuyu Grass Pennisetum clandestinum Flowering time: Rarely, except cultivars in Summer. Reproduction: Spreading stems. Control time: September – February.



Shade Crassula Crassula multicava Flowering time: Winter – Spring. **Reproduction:** Seeds; Spring – Summer. Control time: All year.



Buffalo Grass Stenotaphrum secundatum Flowering time: December to February. Reproduction: Primarily vegetatively, but also seeds. Control time: Autumn and Spring.



Montbretia Crocosmia x crocosmiiflora Flowering time: Spring – Summer. Reproduction: Seeds in Autumn, and corms. Control time: August – September.



Spear Thistle Cirsium vulgare Flowering time: Winter. Reproduction: Seeds; Spring. Control time: April - December



Bulbil Watsonia Watsonia meriana var. bulbillifera Flowering time: After 3rd year; Spring – Summer. Reproduction: Stem bulbils and underground corms; Summer early Autumn.



Pampas Grass species Cortaderia spp. Flowering time: Summer – Autumn. **Reproduction:** Seeds; Winter – Spring.



St John's Wort Hypericum perforatum Flowering time: Summer. **Reproduction:** Seeds; Autumn – Spring. Control time: September - November.



Freesia hybrid Freesia alba x Freesia leichtlinii Flowering time: Spring. Reproduction: Corms and bulbils; Seeds in Spring.



Panic Veldt Grass Ehrharta erecta Flowering time: All year. Reproduction: Seeds; all year. Control time: All year.



Sweet Vernal Grass Anthoxanthum odoratum Flowering time: All year. Reproduction: Seeds; all year.

Control time: Winter – Spring.

African Thistle Berkheya rigida Flowering time: All year, but mostly Spring – Summer. Reproduction: Seeds and rhizomes. Control time: All year.



Boxthorn Lycium ferocissimum Flowering time: 2nd year of growth; usually Summer. Reproduction: Seeds; all year. Control time: All year.



Myrtle-leaf Milkwort Polygala myrtifolia Flowering time: All year, but mostly Winter – Spring. Reproduction: Seeds; Summer. Control time: All year.

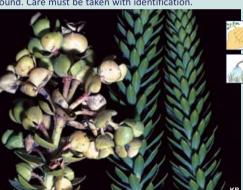


A selection of serious COASTAL ZONE WEEDS present on the Peninsula

Angled Pigface Carpobrotus aequilaterus Flowering time: Spring – Summer. Reproduction: Seeds . Control time: Autumn. Note: Hybrids of this weed can also



Hottentot Fig Carpobrotus edulis Flowering time: Most of the year. Control time: All year. Note: Hybrids of this weed can also



Sea Spurge Euphorbia paralias Flowering time: Spring – Autumn. Reproduction: Seeds. Control time: All year. Note: Its sap is an irritant.

TREES

Cape Wattle Pare Flowering time: Winter. Reproduction: Seeds; Summer. Control time: All year.



Early Black Wattle Acacia decurrens Flowering time: Late Winter – early Spring. Reproduction: Seeds; Summer. Control time: All year. Note: Extra care must be taken with identification due to similarities with other Wattle species.



Cedar Wattle Acacia elata Flowering time: Summer. Reproduction: Seeds; Autumn – early Winter. Control time: All year.



Karamu Coprosma robusta Flowering time: Spring – Summer. **Reproduction:** Seeds; Summer – Winter. Control time: All year.



Cherry Plum Prunus cerasifera Flowering time: Winter – Spring. Reproduction: Seeds within red, yellow or purple fruit;



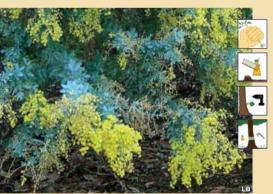
Monterey Pine Pinus radiata Flowering time: Not applicable. Reproduction: Seeds; All year. Control time: All year.



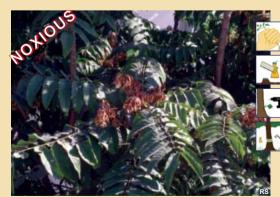
Cluster Pine Pinus pinaster Flowering time: Not applicable. Reproduction: Seed; all year. Control time: All year.



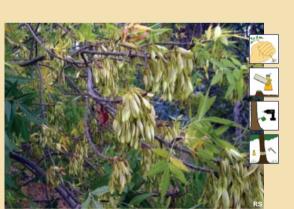
Sweet Pittosporum Pittosporum undulatum Flowering time: Early Spring. Reproduction: Seeds; Autumn – Winter. Control time: All year. Note: As this is a Victorian native, removal requires a permit .



Cootamundra Wattle Acacia baileyan Flowering time: Winter. **Reproduction:** Seeds; Spring – Summer. Control time: All year.



Tree of Heaven Ailanthus altissima Flowering time: Spring. Reproduction: Seeds; Summer. Control time: September – April.

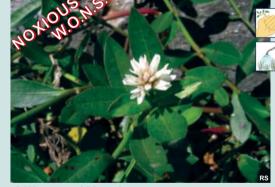


Desert Ash Fraxinus angustifolia subsp. angustifolia Flowering time: late Winter, early Spring. Reproduction: Seeds; Summer. Control time: September – April.



Willow species Salix spp. Flowering time: Spring. Reproduction: Seeds; Summer. Control time: September – April. **Note:** Only some Salix species are Noxious and/or W.O.N.S.

A selection of serious AQUATIC ZONE WEEDS present on the Peninsula



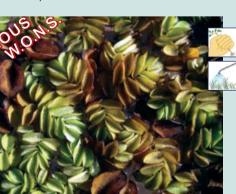
Flowering time: November to January. Reproduction: Vegetative only. Control time: All year (outbreaks must be reported).



Creeping Buttercup Ranunculus repens Flowering time: Spring – Summer. Reproduction: Seeds; late Summer. Control time: All year. **Note:** Not confined to aquatic areas. Produces an irritant. a de la de la martin de la mart



Spiny Rush Juncus acutus Flowering time: All year, but mostly Spring – Summer. **Reproduction: Vegetative, and s**eed; late Spring – Summer. Control time: All year.



Salvinia Salvinia molesta Flowering time: Not applicable. Reproduction: Vegetative only. Control time: All year (outbreaks must be reported).

